Enrollment No: _____ Exam Seat No: _____ C. U. SHAH UNIVERSITY Winter Examination-2021

Subject Name : Bioprocess Technology

Subject Code : 4SC05BPT1			Branch: B.Sc. (Microbiology)	
Semest	er: 5	Date: 15/12/2021	Time: 11:00 To 02:00	Marks: 70
(2) (3)	Use o Instru Draw	of Programmable calculator & any actions written on main answer bo r neat diagrams and figures (if nec me suitable data if needed.		ohibited.
Q-1		Attempt the following question	s:	(14)
	a)	Define :- Fermentation		01
	b)	What is Inoculum?		01
	c)	Enlist the types of Microbial cult	ure.	01
	d)	Enumerate the role of Sparger in	fermentor.	01
	e)	What is Upstream processing?		01
	f)	Enlist any two technique of steril	ization.	01
	g)	Enlist the type of Amylase.		01
	h)	Which organism produces Lactic	acid?	01
	i)	What is homofermentative pathw	vay?	01
	-	What is antifoaming agent?		01
	k)	Give the example of Primary Me		01
	l)	Enlist the Growth phase of organ		01
		Environment is not changed during	ng Continuous culture .T/F	01
		Define: Fed Batch Culture.		01
Attemp	ot any	four questions from Q-2 to Q-8		
Q-2		Attempt all questions		(14)
	a	Give differences between primar	y and secondary metabolites	07
	b	Write a note on batch culture pro	cess.	07
Q-3				(14)
C		Explain Airlift bioreactor includi applications	ng advantage, disadvantage &	
Q-4		Attempt all questions		(14)
τ.	a	Draw the labeled diagram of fer	menter. & explain the types of	07
		Agitator.	· · · · · · · · · · · · · · · · · · ·	
	b	Write a detail note on physical ag	gents of sterilization.	07



Q-5		(14)	
C	a	Attempt all questions Write a detail note on Range of bioprocess technology.	07
	b	Write a detail note Packed Tower fermentor.	07
Q-6		Attempt all questions	(14)
-	a	Write a detail note on Amylase Production.	14
Q-7		Attempt all questions	(14)
	a	Write a brief note on Single cell protein.	07
	b	Write a detail note on Media Preparation	07
Q-8		Attempt all questions	(14)
	a	Write a detail note on Ethanol Production	07
	b	Write a detail note on Bioprocess measurement.	07

